

REMARKS/ARGUMENTS

Reconsideration is respectfully requested.

Claims 1, 4, 6-7, and 9 are pending in the present application before this amendment. By the present amendment, Claim 4 has been canceled without prejudice, and Claim 1 has been amended. No new matter has been added.

Claims 1, 4, 6, and 9 stand rejected under 35 U.S.C. § 103(a) as being obvious over JP01-169749 (Takakubo). The "et al." suffix, which may appear after a reference name, is omitted in this paper.

Claims 1, 4, 6, 7, and 9 are rejected under 35 U.S.C. § 103(a) as being obvious over Takakubo in view of U.S. Patent No. 5,013,635 (Okhawa).

In response, Claim 1 has been amended to further narrow the pressure range to 50-200 milli-Torrs and to incorporate the limitations of Claim 4, i.e., the hydrogenated amorphous carbon contains 5 to 60 atomic percent hydrogen, therein.

The properties of amorphous carbon films formed by PACVD techniques vary considerably with the conditions of the plasma deposition (see the enclosed Table 1, J. Robertson, "Amorphous Carbon", Advances In Physics, 1986, Vol. 35, No. 4, 317-374, and Table 1, B. Dischler, et al., "Infrared and Raman Analysis of Hydrogenated Amorphous Carbon Films...", ISPC-7 Eindhoven, 1985, paper number A-1-4, pages 45-52). The plasma deposition conditions (50-200mTorrs, 250-550volts) of this invention are relatively different from those (30mTorrs, RF 100W) of Takakubo JP 01-169749, which results in a difference in the properties of the amorphous carbon film. Note that the properties of the amorphous carbon film of the presently claimed invention permit absorption of the energy of the laser beam having a wavelength ranging from 300 to 900nm, which results in evolution of hydrogen gas in the amorphous carbon film, and that not all of the amorphous carbon films can absorb

the energy of the laser beam in that wavelength range. In addition, the amorphous carbon film of this invention contains 5 to 60 atomic percent hydrogen which is not disclosed in the Takakubo et al. reference.

Accordingly, it is respectfully submitted that Claim 1, as amended, is not taught or suggested by either Takakubo or Ohkawa, whether they are considered individually or taken together.

For the reasons set forth above, Applicants respectfully submit that Claims 1, 6-7, and 9, now pending in this application, are in condition for allowance over the cited references. This amendment is considered to be responsive to all points raised in the Office Action. Accordingly, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections and earnestly solicit an indication of allowable subject matter. Should the Examiner have any remaining questions or concerns, the Examiner is encouraged to contact the undersigned attorney by telephone to expeditiously resolve such concerns.

Respectfully submitted,

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